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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/054,548	01/18/2002	William Ho Chang	FLEX 2402	7172

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 BEAVERTON, OR 97006

EXAMINER

MILIA, MARK R

ART UNIT	PAPER NUMBER
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2625

DATE MAILED: 08/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/054,548

Applicant(s)

CHANG ET AL.

Examiner

Mark R. Milia

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 June 2006.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7, 9-11, 13 and 15-23 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-7, 9-11, 13 and 15-23 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 14 June 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. Applicant's amendment was received on 6/17/06 and has been entered and made of record. Currently, claims 1-7, 9-11, 13, and 15-23 are pending.

Drawings

2. The drawings were received on 5/18/06. These drawings are acceptable.

The current amendment to label Figs. 1A, 1B, 4A, and 4B as prior art and current amendment to the specification to insert reference numerals that were previously omitted has overcome the objection as cited in the previous Office Action. Therefore the objection has been withdrawn.

Specification

3. The current amendment to the specification to delete reference numeral "720" has overcome the objection as cited in the previous Office Action. Therefore the objection has been withdrawn.

Response to Arguments

4. Applicant's arguments with respect to claims 1-7, 9-11, 13, and 15-23 have been considered but are moot in view of the current amendments to the claims, therefore a new ground(s) of rejection will be made. Newly added claims 21-23 will be addressed in the following rejection.

Claim Rejections - 35 USC § 103

5. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

6. Claims 1-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6421748 to Lin et al. in view of U.S. Patent No. 6020973 to Levine et al.

Regarding claim 1, Lin discloses an information apparatus for managing outputting of content to an output device, the information apparatus being a distinct device from the output device, the content accessible at least partly by the information apparatus, the information apparatus comprising: a communication unit to communicate with the output device (see Fig. 1 and column 2 lines 58-64), a user interface for interacting with a user (see Fig. 1 and column 2 lines 58-64), means for establishing a communication channel between the information apparatus and the output device (see column 2 line 65-column 3 line 8), means for receiving over the communication channel one or more components associated with the output device and over the communication

channel enabling the content to be rendered by the output device, the one or more components not previously stored or installed in the output device (see column 3 lines 1-8 and 26-43 and column 4 lines 36-41), and means for conforming at least part of the content into one or more output images with said one or more components (see column 3 lines 44-65).

Lin does not disclose expressly means for generating an intermediate output data including said one or more output images and for rendering by the output device and means for delivering the intermediate output data to the output device for rendering.

Levine discloses means for generating an intermediate output data including said one or more output images (see column 7 lines 40-47) and for rendering by the output device and means for delivering the intermediate output data to the output device for rendering (see column 7 lines 40-47).

Lin & Levine are combinable because they are from the same field of endeavor, interfacing clients with a plurality of output devices.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the intermediate output data (PDL), as described by Levine, and which is well known in the art, with the system of Lin. Further, the examiner would like to point out that the applicant admits that generating output data in PDL form from data content and sending the PDL (intermediate data) to an output device to be rasterized is prior art, as seen in Fig. 1B.

The suggestion/motivation for doing so would have been to provide image data in a form that contains information about printing parameters to be utilized during rendering.

Therefore, it would have been obvious to combine Levine with Lin to obtain the invention as specified in claim 1.

Regarding claim 2, Lin further discloses managing outputting of content to an output device selected from a plurality of output devices, wherein the communication unit communicates with said plurality of output devices, and the apparatus includes means to select an output device from said plurality of output devices (see column 4 lines 36-37).

Regarding claim 3, Lin further discloses in which the one or more components includes one or more of a rasterization vector, a price indicator, an availability indicator, a status indicator, an output data format indicator, and a quality of service indicator (see column 3 lines 58-65).

7. Claims 6-7, 9, 11, and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6493104 to Cromer et al. in view of Levine (US 6020973).

Regarding claim 6, Cromer discloses an information apparatus content to an output device, the information apparatus being a distinct device from the output device,

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the content accessible at least partly by the information apparatus, the for managing the outputting of content accessible at least partly information apparatus comprising: a wireless communication unit to communicate with one or more output devices (see Fig. 1 and column 1 line 63-column 2 line 12), a user interface for interacting with a user (see Fig. 1 "110"), means for searching and discovering with short range wireless communication one or more wireless output devices in the vicinity (see column 2 line 49-column 3 line 12 and column 5 line 31-column 6 line 48) and means for selecting an output device from among the one or more discovered output devices (see column 2 line 49-column 3 line 12 and column 5 line 31-column 6 line 48).

Cromer does not disclose expressly means for obtaining one or more device dependent attributes associated with the output device, means for conforming at least part of the content into one or more output images with said one or more device dependent attributes, at least part of said one or more output images including mixed raster content encoding, means for generating an intermediate output data including said one or more output images, and means for delivering the intermediate output data to the output device for rendering.

Levine discloses means for obtaining one or more device dependent attributes associated with the output device (see column 10 lines 58-62, column 16 line 48-column 17 line 8, and claim 3), means for conforming at least part of the content into one or more output images with said one or more device dependent attributes (see column 10 lines 58-62, column 16 line 48-column 17 line 8, and claim 3), means for generating an intermediate output data including said one or more output images (see column 7 lines

40-47), and means for delivering the intermediate output data to the output device for rendering (see column 7 lines 40-47).

Cromer & Levine are combinable because they are from the same field of endeavor, establishing communication between client devices and output devices.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the obtaining of device dependent attributes and utilizing the attributes to generate intermediate data (PDL) that is delivered to an output device for rendering, as described by Levine, and which is well known in the art, with the system of Cromer. Further, the examiner would like to point out that the applicant admits that generating output data in PDL form from data content and sending the PDL (intermediate data) to an output device to be rasterized is prior art, as seen in Fig. 1B.

The suggestion/motivation for doing so would have been to provide image data in a form that contains information about printing parameters to be utilized during rendering.

Therefore, it would have been obvious to combine Levine with Cromer to obtain the invention as specified in claim 6.

Regarding claim 7, Levine further discloses the means for obtaining one or more device dependent attributes includes means for obtaining from one or more sources that includes a user input, a network server, a default value stored in the information apparatus, and from the output device (see column 10 lines 58-62 and column 12 lines 62-63).

Regarding claim 9, Levine further discloses means for obtaining over the communication channel an output device profile that includes the device dependent attributes (see column 10 lines 58-62, column 16 line 48-column 17 line 8, and claim 3).

Regarding claim 11, Levine further discloses in which the means for conforming includes means for conforming at least part of the content into at least one output image by one or more of a rasterization operation, a scaling operation, an interpolation operation, and a compression operation (see column 7 lines 40-47).

Regarding claim 21, Cromer further discloses wherein the information apparatus is a wireless mobile device (see column 2 line 49-column 3 line 12 and column 5 line 31-column 6 line 48).

8. Claims 13, 15-16, 18-19, and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cromer (US 6493104) in view of U.S. Patent No. 6584903 to Jacobs.

Regarding claim 13, Cromer discloses an information apparatus capable of outputting content to an output device, the information apparatus being a distinct device from the output device, the content accessible at least partly by the information apparatus, the information apparatus comprising: a wireless communication unit to communicate with an output device (see Fig. 1 and column 1 line 63-column 2 line 12), a user interface for interacting with a user (see Fig. 1 "110"), means for searching and discovering with short range wireless communication one or more wireless output devices in the vicinity (see column 2 line 49-column 3 line 12 and column 5 line 31-column 6 line 48) and means for selecting an output device from among the one or

more discovered output devices (see column 2 line 49-column 3 line 12 and column 5 line 31-column 6 line 48), and means for establishing a communication channel between the information apparatus and the selected output device with short range wireless communication (see column 2 line 49-column 3 line 12 and column 5 line 31-column 6 line 48).

Cromer does not disclose expressly means for conforming at least part of the content into at least one output image with at least one predefined standard rasterization parameter values, the standard rasterization parameter being device independent of the selected output device, means for generating an intermediate output data including the one or more output image, the intermediate output data being at least partly device independent of the selected output device, and means for delivering via the established communication channel the intermediate output data to the output device for rendering.

Jacobs discloses means for conforming at least part of the content into at least one output image with at least one predefined standard rasterization parameter values, the standard rasterization parameter being device independent of the selected output device (see abstract, column 1 lines 14-20 and 57-61, column 2 lines 29-35 and 42-49, and column 2 line 66-column 3 line 1), means for generating an intermediate output data including the one or more output image, the intermediate output data being at least partly device independent of the selected output device (see abstract, column 1 lines 14-20 and 57-61, column 2 lines 29-35 and 42-49, and column 2 line 66-column 3 line 1), and means for delivering via the established communication channel the

intermediate output data to the output device for rendering (see abstract, column 1 lines 14-20 and 57-61, column 2 lines 29-35 and 42-49, and column 2 line 66-column 3 line 1).

Cromer & Jacobs are combinable because they are from the same field of endeavor, printing document data via a printing device.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the device independent data, as described by Jacobs, and which is well known in the art, with the system of Cromer. Further, the examiner would like to point out that the applicant admits that generating output data in PDL form from data content and sending the PDL (intermediate data) to an output device to be rasterized is prior art, as seen in Fig. 1B.

The suggestion/motivation for doing so would have been to enable image data to be printed by any printer that is discovered on a network. Further, overall system efficiency and compatibility is increased.

Therefore, it would have been obvious to combine Jacobs with Cromer to obtain the invention as specified in claim 13.

Regarding claim 15, Jacobs further discloses obtaining over the communication channel an output device means for profile (see column 2 lines 11-13 and 50-56).

Regarding claim 16, Jacobs further discloses means for obtaining over the communication channel information related to the intermediate output data format (see

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abstract, column 1 lines 14-20 and 57-61, column 2 lines 29-35 and 42-49, and column 2 line 66-column 3 line 1).

Regarding claim 18, Jacobs further discloses in which the predefined standard rasterization values is included in the information apparatus (see column 1 lines 14-20 and column 2 lines 11-13 and 29-35).

Regarding claim 19, Jacobs further discloses in which the means for conforming includes means for conforming at least part of the content into at least one output image by one or more of a rasterization operation, a scaling operation, an interpolation operation, and a compression operation (see column 10 lines 58-62 and column 16 line 48-column 17 line 8).

Regarding claim 22, Cromer further discloses wherein the information apparatus is a wireless mobile device (see column 2 line 49-column 3 line 12 and column 5 line 31-column 6 line 48).

9. Claims 4 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lin and Levine as applied to claim 1 above, and further in view of Buckley (US 6798530).

Regarding claim 4, Lin and Levine do not disclose expressly the communication channel includes a wireless communication channel.

Buckley discloses the communication channel includes a wireless communication channel (see column 5 lines 37-49).

Regarding claim 23, Lin and Levine don not disclose expressly wherein the wireless communication channel includes one or more of a Bluetooth, an infrared, a IEEE 802 and a wireless standard based on 2.4 GHz frequency.

Buckley discloses wherein the wireless communication channel includes one or more of a Bluetooth, an infrared, a IEEE 802 and a wireless standard based on 2.4 GHz frequency (see column 5 lines 37-49).

Lin, Levine, & Buckley are combinable because they are from the same field of endeavor, interfacing clients with output devices.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the wireless communication channel, as described by Buckley, and which is well known in the art, with the system of Lin and Levine.

The suggestion/motivation for doing so would have been to avoid the need for a wired connection between an information apparatus and an output device, therefore enabling greater versatility by allowing portable devices, such as laptops, PDAs, etc. to utilize the system.

Therefore, it would have been obvious to combine Buckley with Lin and Levine to obtain the invention as specified in claims 4 and 23.

10. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lin and Levine as applied to claim 1 above, and further in view of Buckley and Kupka (US 6434535).

Lin and Levine do not disclose expressly means for sending payment information to a device as compensation for the rendering of the content by the output device, the apparatus and the device communicating using local short range wireless communication.

Kupka discloses means for sending payment information to a device as compensation for the rendering of the content by the output device (see Fig. 1, column 3 line 53-column 4 line 3, column 7 line 48-column 8 line 7, and column 14 lines 3-16).

Buckley discloses the apparatus and the device communicating using local short range wireless communication (see column 5 lines 37-49).

Lin, Levine, Buckley, & Kupka are combinable because they are from the same problem solving area, distribution of electronic data.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the sending of payment information, which is well known and used in the art, as described by Kupka, and the wireless communication channel, as described by Buckley, with the system of Lin and Levine.

The suggestion/motivation for doing so would have been to accurately calculate and collect payment for services rendered (data rendered).

Therefore, it would have been obvious to combine Kupka and Buckley with Lin and Levine to obtain the invention as specified in claim 5.

11. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cromer and Levine as applied to claim 6 above, and further in view of Kupka (US 6434535).

Cromer discloses the apparatus and the device communicating using local short range wireless communication (see column 2 line 49-column 3 line 12 and column 5 line 31-column 6 line 48).

Cromer and Levine do not disclose expressly means for sending payment information to a device as compensation for the rendering of the content by the output device.

Kupka discloses means for sending payment information to a device as compensation for the rendering of the content by the output device (see Fig. 1, column 3 line 53-column 4 line 3, column 7 line 48-column 8 line 7, and column 14 lines 3-16).

Cromer, Levine, & Kupka are combinable because they are from the same problem solving area, distribution of electronic data.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the sending of payment information, which is well known and used in the art, as described by Kupka, with the system of Cromer and Levine.

The suggestion/motivation for doing so would have been to accurately calculate and collect payment for services rendered (data rendered).

Therefore, it would have been obvious to combine Kupka with Cromer and Levine to obtain the invention as specified in claim 10.

12. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cromer and Jacobs as applied to claim 13 above, and further in view of Kupka (US 6434535).

Cromer discloses the apparatus and the device communicating using local short range wireless communication (see column 2 line 49-column 3 line 12 and column 5 line 31-column 6 line 48).

Cromer and Jacobs do not disclose expressly means for sending payment information to a device as compensation for the rendering of the content by the output device.

Kupka discloses means for sending payment information to a device as compensation for the rendering of the content by the output device (see Fig. 1, column 3 line 53-column 4 line 3, column 7 line 48-column 8 line 7, and column 14 lines 3-16).

Cromer, Jacobs, & Kupka are combinable because they are from the same problem solving area, distribution of electronic data.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the sending of payment information, which is well known and used in the art, as described by Kupka, with the system of Cromer and Jacobs.

The suggestion/motivation for doing so would have been to accurately calculate and collect payment for services rendered (data rendered).

Therefore, it would have been obvious to combine Kupka with Cromer and Jacobs to obtain the invention as specified in claim 17.

13. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cromer and Jacobs as applied to claim 13 above, and further in view of Buckley (US 6798530).

Cromer and Jacobs does not disclose expressly in which the means for conforming conforms at least part of the content into an output image that includes one or more of a compression, mixed raster content encoding, and sound encoding.

Buckley discloses the means for conforming conforms at least part of the content into an output image that includes one or more of a compression, mixed raster content encoding, and sound encoding (see column 9 lines 26-36).

Cromer, Jacobs, & Buckley are combinable because they are from the same field of endeavor, distribution of electronic data.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the mixed raster content encoding, as described by Buckley, with the system of Cromer and Jacobs.

The suggestion/motivation for doing so would have been to provide a more accurate representation of the image data by allowing different output devices to print different layers of an image.

Therefore, it would have been obvious to combine Buckley with Cromer and Jacobs to obtain the invention as specified in claim 20.

Conclusion

14. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark R. Milia whose telephone number is (571) 272-7408. The examiner can normally be reached M-F 8:00am-4:00pm.

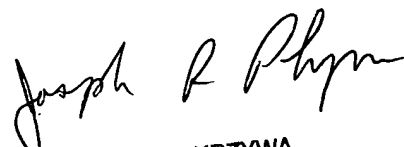
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Twyler M. Lamb can be reached at (571) 272-7406. The fax number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Mark R. Milia
Examiner
Art Unit 2625

MRM


JOSEPH R. POKRZYWA
PRIMARY EXAMINER